HONORING TONY RUSSELL

HON. JOHN T. DOOLITTLE

OF CALIFORNIA

IN THE HOUSE OF REPRESENTATIVES

Tuesday, July 16, 2002

Mr. DOOLITTLE. Mr. Speaker, today I wish to remember and honor a dedicated public servant, Mr. Russell Anthony Tuccelli. After a lifetime of hard work and commitment to his family, community, and state, my friend, who was better known as Tony Russell, passed away on April 20, 2002. Having completed an eight-year battle with cancer, he was buried at sea on May 8th. He was 75 years old.

Tony had a long and distinguished career working in the news media and on behalf of state and local governments. During the 1970s he was the news director for both KCRA Radio and KFBK Radio in Sacramento, California. He also was a foreign correspondent for United Press International and a talk show host for KFBK.

In 1980, Tony assumed the role of director of communications for the Senate Minority Caucus in the California State Legislature. Later, he became my district coordinator when I represented the 3rd State Senatorial District. I deeply appreciate the valuable service he provided me. In 1984, he left my office to become an administrative assistant to the Sacramento County Board of Supervisors. In 1987 he moved over to a similar position for the Sacramento City Council before joining the Governor's Office of Criminal Justice Planning as the chief of communications.

The year 1991 marked the beginning of his decade of service to California's Employment Development Department. Within this agency he worked as a public information officer, marketing specialist, and an associate information systems analyst.

He was known as a leader in the community through his involvement as a youth mentor in EDD's School Partnership Program. Also, he was often the guest speaker at swearing-in ceremonies for our newest U.S. citizens, giving everyone in attendance a brief history lesson and instilling a rousing sense of patriotism.

Tony is survived by his loving wife of 49 years, Lenamarie Tuccelli. He is also survived by his son Michael and daughter-in-law Erin, his son Stephen and daughter-in-law Karen, and his grandchildren Angela, Raymond, Stephanie, and Ryan. Tony Russell will be greatly missed by his family and friends, but his legacy of devotion to family and service to the community remains with us forever.

RECENT STEM CELL BREAKTHROUGHS

HON. MARK E. SOUDER

OF INDIANA

IN THE HOUSE OF REPRESENTATIVES

Tuesday, July 16, 2002

Mr. SOUDER. Mr. Speaker, recently a scientific study was published that should have ended the ongoing debate regarding human cloning and embryonic stem cell research. Researchers reported that they have identified a cell from bone marrow that is capable of transforming itself into most, or even all, of the specialized cells in the body.

This finding suggests that every one of us may carry our own ''repair kit'' that can be used to treat countless medical conditions and genetic disorders.

The New York Times reports that these ''cells could in principle do everything expected of embryonic stem cells, with two extra advantages.'' They do not form tumors, which are a serious hazard associated with embryonic stem cells, and they could be derived from the patient to be treated. ''Being the patient's own cells, they would be at no risk of immune rejection.''

And the Washington Post notes that this discovery ''heightens the prospect that therapies scientists are trying to create—cures for diabetes, Parkinson's disease, hemophilia and many others—can be made entirely with adult cells alleviating moral concerns'' that exist with the research involving embryos and clones.

Yet, proponents of these unethical and unproven practices have largely ignored theses adult stem cell breakthroughs. But the facts are simple.

Research using embryos and clones requires the creation and destruction of a form of human life. Adult stem cell research does not. In fact, adult stem cells are widely available in every one of us.

Research using embryos and clones has yet to produce any clinical applications for human patients. Adult stem cell therapies are currently used to treat a host of medical conditions with new breakthroughs announced on an almost weekly basis.

Without a doubt, embryonic stem cell research and cloning are highly speculative and problematic. Both require the destruction of human embryos and the diversion of finite, and much needed, funds and resources away from more promising research avenues, such as adult stem cells.

[From the Washington Post, Fri. June 21, 2002]

STUDY FINDS POTENTIAL IN ADULT CELLS; DISCOVERY WILL LIKELY FUEL ETHICAL DEBATE

(By Justin Gillis)

Researchers have isolated a type of cell from bone marrow that seems capable of transforming itself into most or all of the specialized cells in the body, a dramatic new finding likely to fuel the debate over the ethics of stemcell research.

The finding was reported by researchers at the University of Minnesota and published online yesterday by the journal Nature. It heightens the prospect that therapies scientists are trying to create—cures for diabetes, Parkinson's disease, hemophilia and many others—can be made entirely with adult cells, alleviating moral concerns over using discarded embryos and fetuses as sources of tissue.

There has been conflicting evidence about whether cells found in adults might be as useful as those derived from embryos. But the work by Catherine Verfaillie, known as a fastidious and cautious researcher, was widely acknowledged as the most definitive evidence to date that adult cells may be almost as versatile as embryonic cells. Austin Smith, a prominent researcher in Scotland who has criticized some prior studies using such cells, called the Verfaillie paper ''extraordinary.''

The work is still at an early stage, however, and Verfaillie asked that it not be used as a political weapon to fight simultaneous work on embryonic and fetal cells.

''I think it is going to be important to be in a position to really compare and contrast the cells,'' she said, with the ultimate goal of determining ''which cells are going to work for which therapy.''

As if to underscore that point, Nature simultaneously published work at the National Institutes of Health showing that embryo-derived cells can vastly improve symptoms similar to those associated with Parkinson's disease in mice. That work, led by Ron McKay, is one of the most convincing demonstrations to date that such embryonic cells may be useful in medical care.

The cells in McKay's experiments, derived from mouse embryos, took up residence at the right spot in the brains of adult mice and produced dopamine—a critical substance that is in short supply in Parkinson's disease—in exactly the way that would be needed to relieve the symptoms of the ailment. It is far from proof of a cure, but ''it's absolutely definitive evidence that these cells can work in the brain,'' McKay said.

The more unexpected finding was that of Verfaillie, director of the University of Minnesota's Stem Cell Institute. With the paper, she joined the company of biologists who are overturning the dogma that animal development proceeds in one irreversible direction, from the unspecialized cell formed when sperm and egg fuse to the highly specialized cells of an adult body.

Hints of her work had been emerging for two years in papers and scientific conferences, and scientists had been eagerly awaiting it. Many other reports, some of them controversial, already emerged in recent years of various adult cell types being able to perform unexpected feats of transformation. But Verfaillie has discovered what appears to be the most flexible adult-derived cell yet.

She calls the cells in question ''multipotent adult progenitor cells.'' She and her colleagues have isolated them from mice, rats and people, though they are only able to do so in 70 percent to 80 percent of the people they test, for unknown reasons.

In animal experiments, the cells proved to lack certain characteristics of embryonic stem cells, which are capable of making every tissue in an animal's body. But they shared many other characteristics and proved to be able to transform into cells of the liver, lung, gut, blood, brain and other organs. They have proven particularly amenable to transformation into liver cells.

Many of the types of experiments Verfaillie reported, which involved injecting the adult cells into developing mouse embryos, cannot ethically be done in humans. But further animal experimentation may clear the way to use the cells in treating human disease. Several scientists cautioned that this will take years, at best.

Verfaillie's results suggest the tantalizing possibility that every adult may carry around the raw material of his or her own repair kit—one that nature is somehow failing to use in many diseases but that scientists might be able to exploit to make new tissues and revivify failing organs.

Cells derived from a person's bone marrow would be unlikely to be rejected by the immune system, a potential problem with treatments based on embryonic- or fetal-derived cells.

Verfaillie said the cells might even be useful for correcting genetic diseases. They could be taken out of the body, a repaired gene could be inserted, doctors could grow many copies and then the cells would be inserted into a deficient organ such as the liver, along with proper manipulations to get them to turn into functional liver cells.

The Verfaillie work ''is a nice research paper,'' said John Gearhart, a biologist at Johns Hopkins University in Baltimore and one of the two American scientists known